SONY

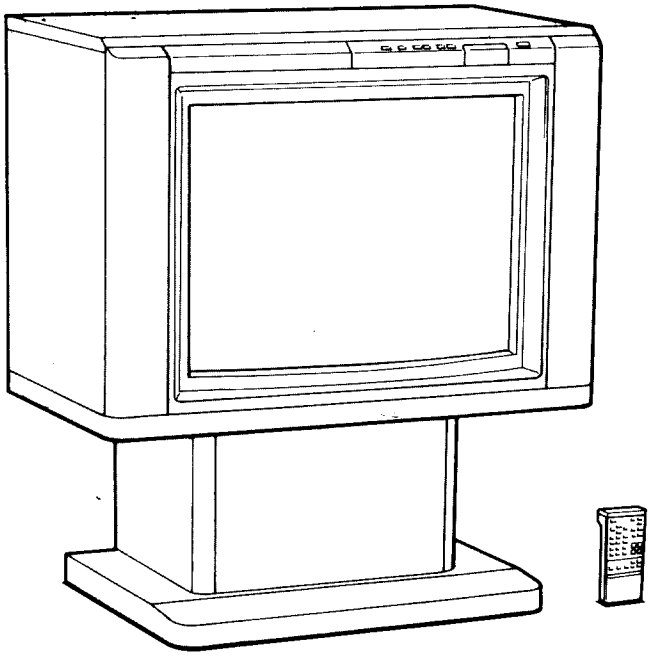
TRINITRON® COLOR TV

KV-2786R

OWNER'S RECORD

The model and serial numbers are located at the rear. Record the number in the space provided below. Refer to them whenever you call upon your Sony dealer regarding this product.

Model No. KV-2786R Serial No. _____



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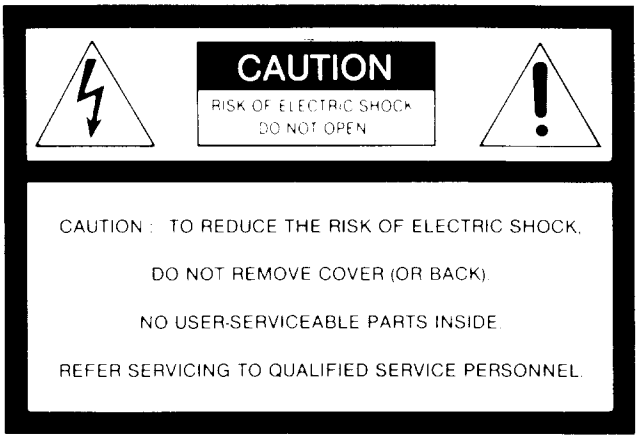
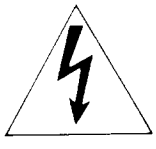
WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.


CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION : TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

CAUTION
TO PREVENT ELECTRIC SHOCK, DO NOT USE THIS POLARIZED AC PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

Safety

- Operate the unit only on 120 V AC.
- One blade of the plug is wider than the other for the purpose of safety and will fit into the power outlet only one way. If you are unable to insert the plug fully into the outlet, contact your dealer.
- Should any liquid or solid object fall into the cabinet, unplug the unit and have it checked by qualified personnel before operating it any further.
- Unplug the unit from the wall outlet if it is not going to be used for several days or more. To disconnect the cord, pull it out by the plug. Never pull the cord itself.

Installation

- To prevent internal heat build-up, do not block the ventilation openings.
- Do not install the unit in a hot or humid place or in a place subject to excessive dust or mechanical vibration.

Cleaning

Clean the unit with a slightly damp soft cloth. Use a mild household detergent. Never use strong solvents such as thinner or benzine as they might damage the finish of the cabinet.

Repacking

Retain the original carton and packing materials for safe transport of this unit in the future.

Use of this television receiver for other than private viewing of programs broadcast on UHF or VHF or transmitted by cable companies for the use of the general public may require authorization from the broadcaster/cable company and/or program owner.

FEATURES

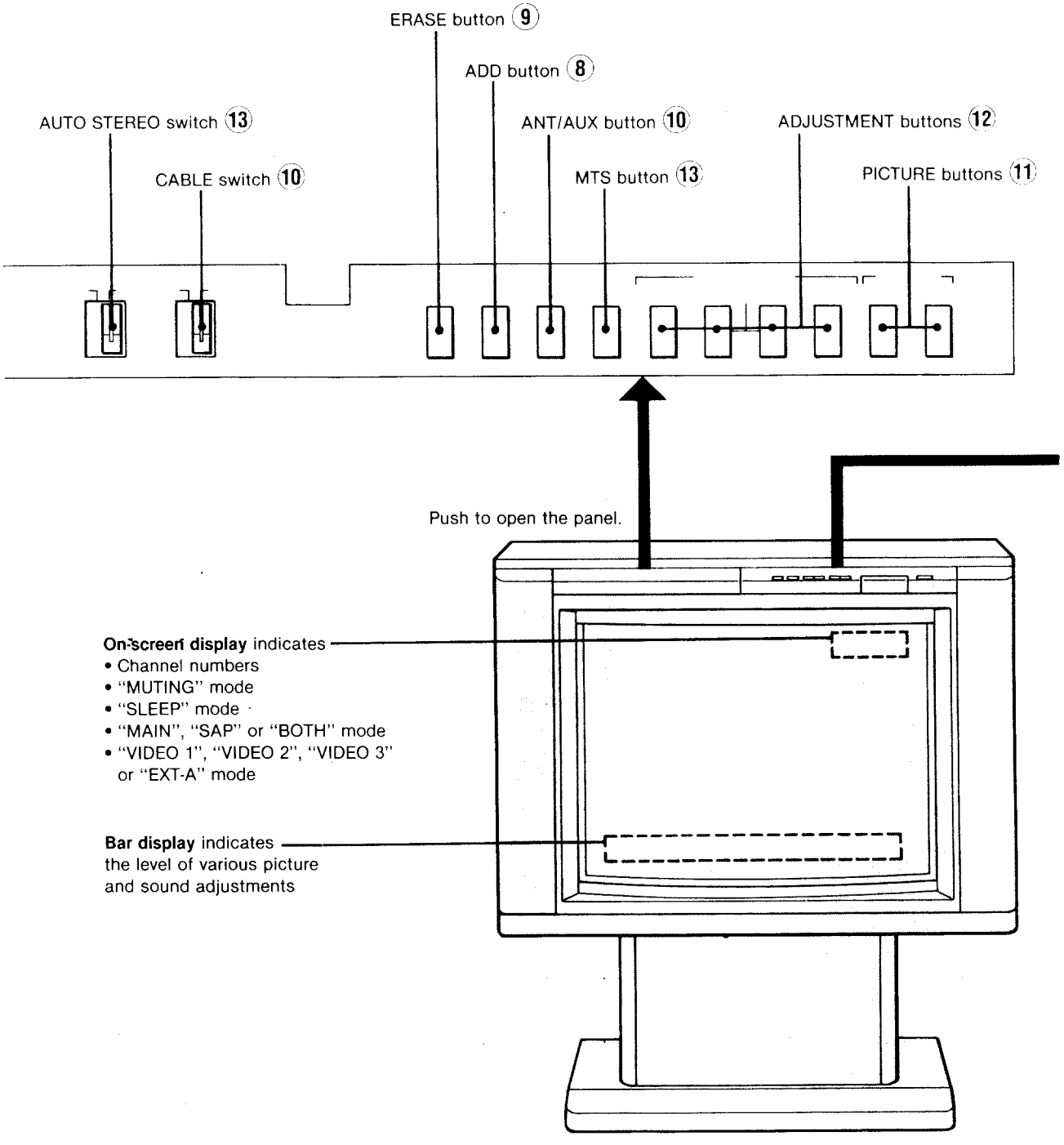
- **New Microblack™ Trinitron picture tube** with more finely pitched aperture grille for higher resolution, higher contrast picture
- **Multi-band VHF/UHF/CATV tuner** receives up to 125 cable channels for a total of 181 possible off-air and cable channels.
- **Built-in Multichannel TV Sound (MTS) decoder** enables reception of stereo programs and Second Audio Program (SAP) broadcasts.*
- **Picture-in-Picture feature** lets you watch more than one channel at once. Another TV channel or a video source can be displayed in a box inset into the corner of the primary screen.
- **External-audio selector** enables you to receive FM simulcasted programs with the addition of optional equipment.
- **Three built-in video and L/R audio line inputs** allow direct hook-up to VCRs, video disc players, video games or other audio/video sources.
- **Sleep timer** automatically turns off the TV after one hour.
- **Full-function Remote Commander** provides wireless control of all operating controls.
- **On-screen displays** for easy reference to operating modes and adjustments
- **Dynamic Color™ circuitry** assures accurate, life-like skintones and pure whites.
- **Dynamic Picture™ circuitry** automatically adjusts the picture contrast to produce more detail in bright and dark areas of the scene.
- **Colorpure Filter™** separately processes B/W picture information from color information to produce a dramatically sharper picture.

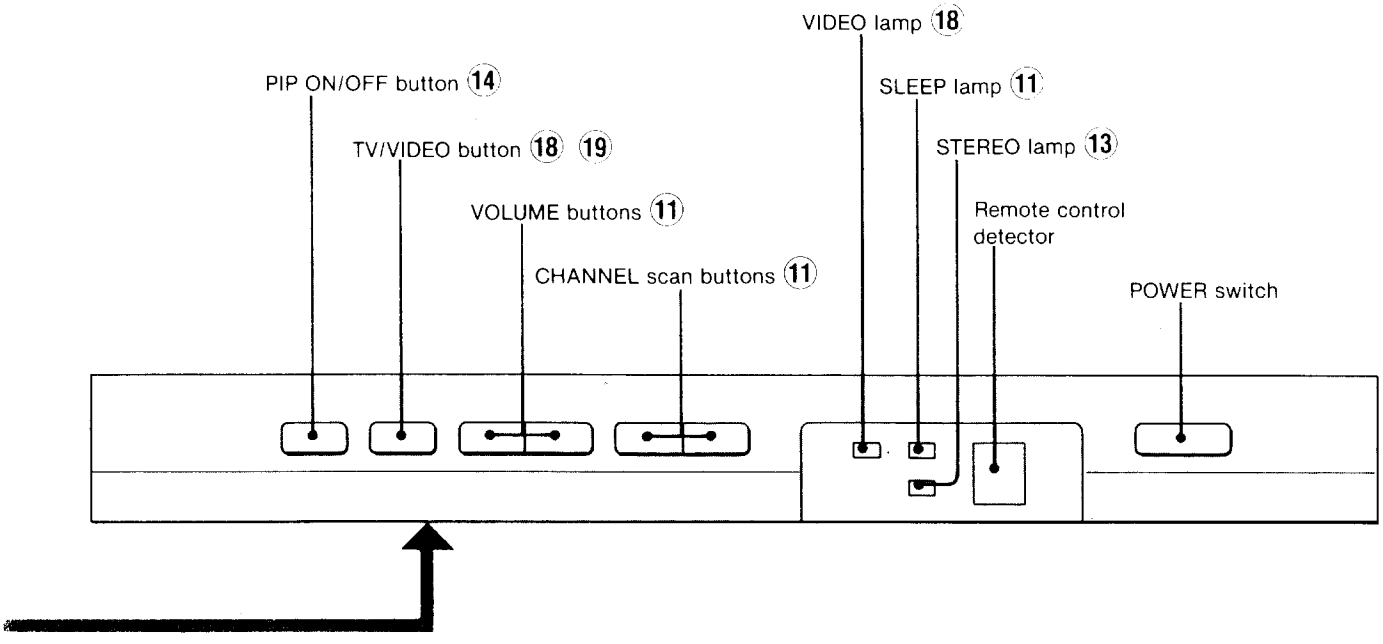
* Depends on the availability of off-air stereo broadcasts.

LOCATION OF CONTROLS

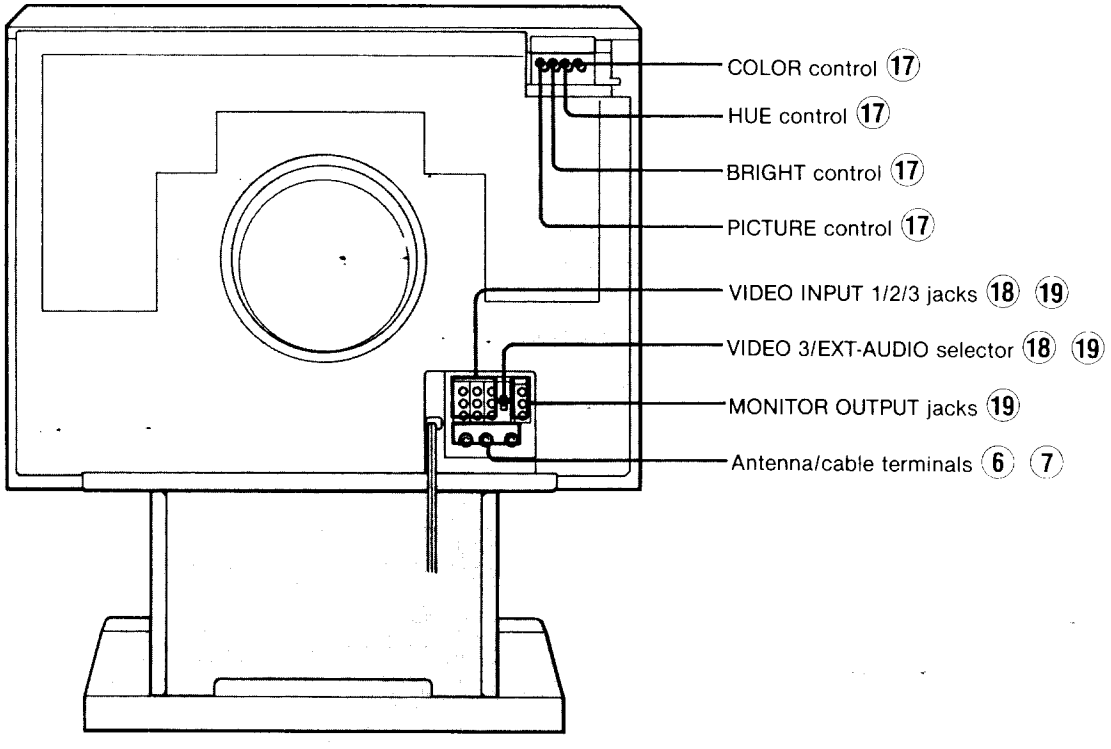
For further details, refer to the page numbers next to each item.

Front


ERASE button (9)
ADD button (8)
AUTO STEREO switch (13)
ANT/AUX button (10)
ADJUSTMENT buttons (12)
CABLE switch (10)
MTS button (13)
PICTURE buttons (11)
Push to open the panel.
On-screen display indicates
• Channel numbers
• "MUTING" mode
• "SLEEP" mode
• "MAIN", "SAP" or "BOTH" mode
• "VIDEO 1", "VIDEO 2", "VIDEO 3" or "EXT-A" mode
Bar display indicates the level of various picture and sound adjustments


VIDEO lamp (18)
PIP ON/OFF button (14)
SLEEP lamp (11)
TV/VIDEO button (18) (19)
STEREO lamp (13)
VOLUME buttons (11)
Remote control detector
CHANNEL scan buttons (11)
POWER switch

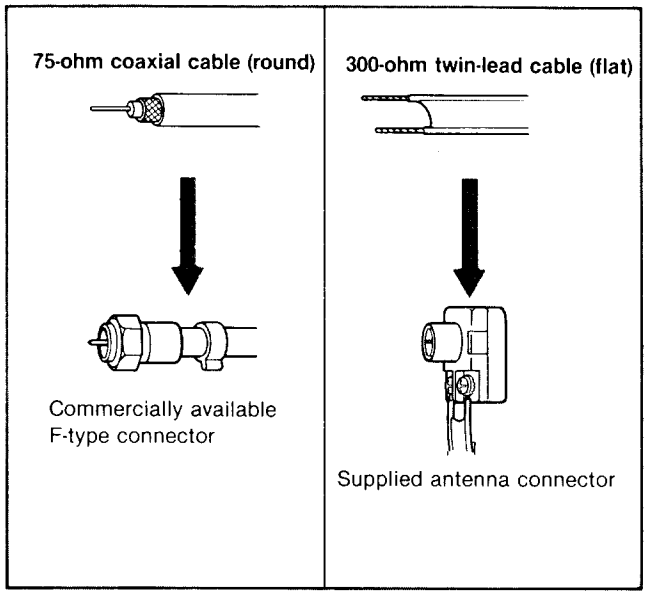
Rear


COLOR control (17)
HUE control (17)
BRIGHT control (17)
PICTURE control (17)
VIDEO INPUT 1/2/3 jacks (18) (19)
VIDEO 3/EXT-AUDIO selector (18) (19)
MONITOR OUTPUT jacks (19)
Antenna/cable terminals (6) (7)

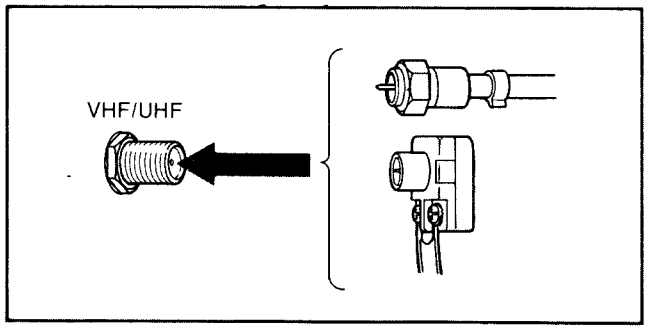
ANTENNA/CABLE CONNECTION

To connect a VHF antenna, UHF antenna, VHF/UHF combination antenna * or CATV cable

1 Check the cable type and attach the appropriate connector to the antenna end.



2 Plug the connector into the VHF/UHF antenna terminal on the rear of the unit.

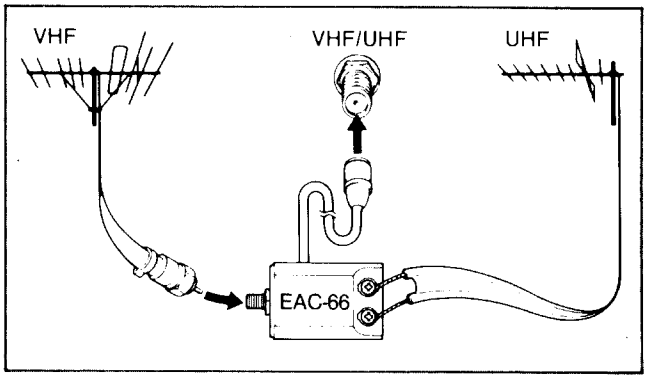


* Most combination antennas are equipped with a signal splitter. Remove the splitter and attach the appropriate connector.

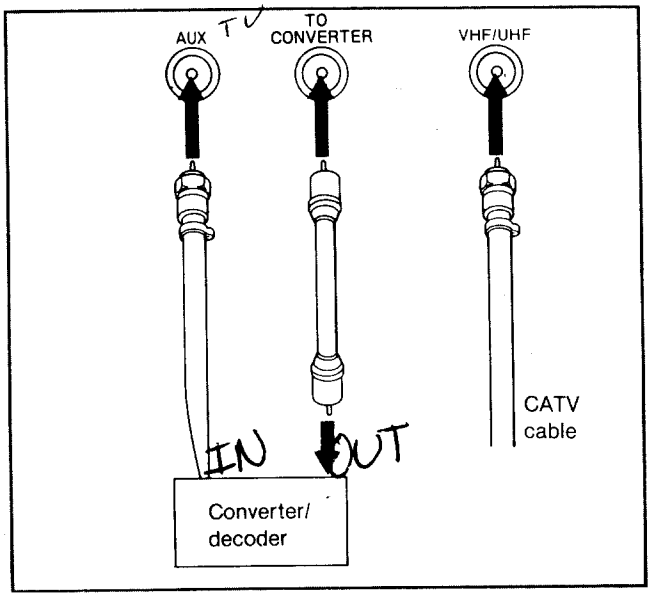
To connect both VHF and UHF antennas

1 Attach an F-type connector to the VHF antenna end.

2 Plug an optional EAC-66 U/V mixer into the VHF/UHF antenna terminal on the rear of the unit. Connect the antenna ends to the U/V mixer.



To connect a cable with a special converter/decoder (pay CATV)



Notes

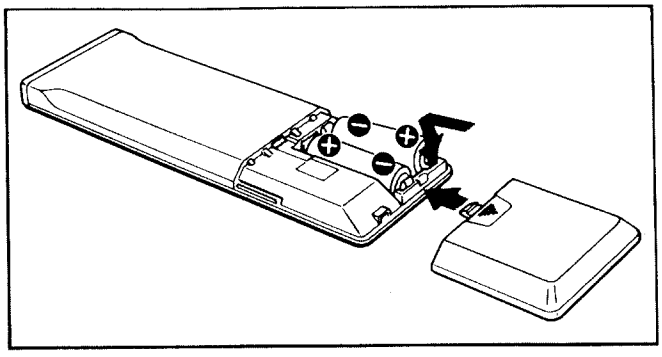
- For CATV reception, use the cable and/or converter/decoder supplied by the cable system operator.
- Snow and noise may appear in the pictures of the CATV channels over 37 (W+1), when the U/V mixer is used.

Note to CATV system installer

This reminder is provided to call the CATV system installer's attention to Article 820-22 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

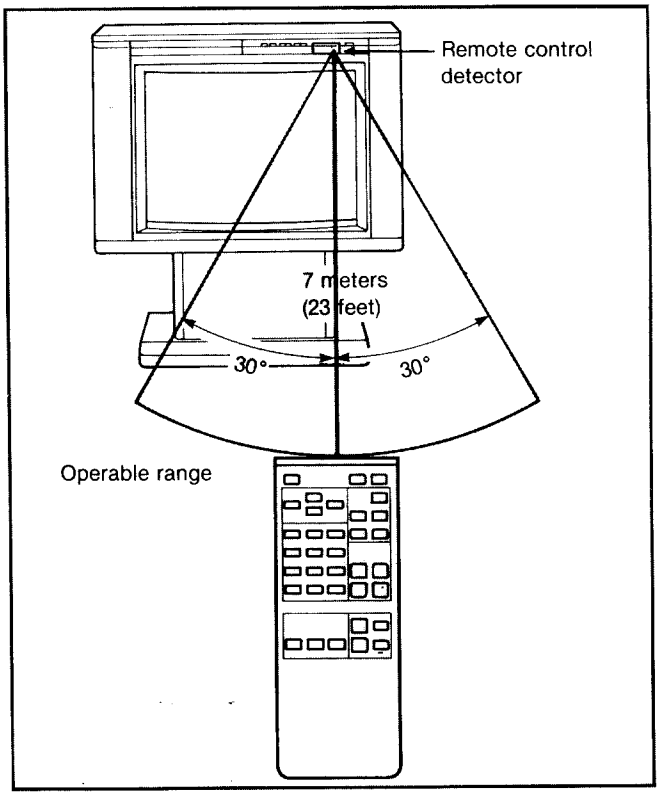
Battery installation

Install two size AA (IEC designation R6) batteries into the battery compartment with the correct polarity.



Notes

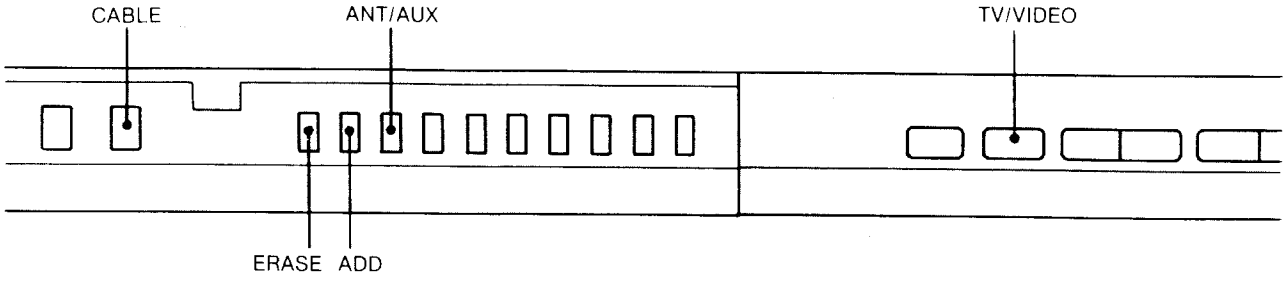
- In normal operation, batteries will last up to half a year. If the unit does not operate properly, the batteries might be exhausted. Replace all with new ones.
- To avoid damage from possible battery leakage, remove the batteries for extended unused periods.
- Be sure that there are no obstructions between the Commander and the unit.
- Operable range is limited.



PROGRAMMING FAVORITE CHANNELS

The TV can be programmed so that when the CHANNEL +/– buttons are pressed, only locally available or favorite channels will be scanned, and unwanted channels will be skipped.

Some channels have already been programmed into the TV at the factory. Scan through the channels, and select the channels to be added and those to be erased.



PREPARATIONS

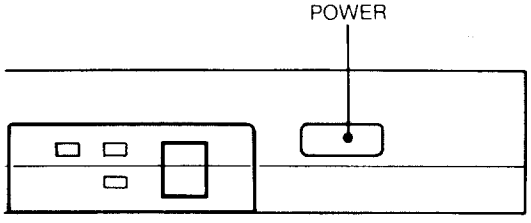
1 Press POWER to turn on the unit.
2 On-screen indications "VIDEO 1", "VIDEO 2", "VIDEO 3" or "EXT-A" should be off. If not, press TV/VIDEO so that they disappear.
3 Set CABLE and ANT/AUX according to the channel to be added or erased.

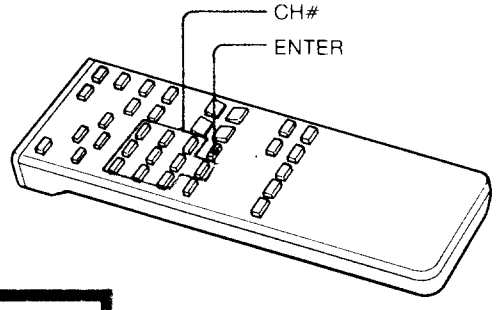
Channel	CABLE switch	ANT/AUX button
VHF	OFF	Press so that "AUX" disappears.
UHF		
Cable TV	ON	
Pay cable TV		Press so that "AUX" appears.

ADDING CHANNELS

1 Press CH# button(s) and then ENTER to select the channel to be added.
2 Press ADD.
A "+" appears for a moment to the left of the on-screen channel number display. This channel has now been added to the channel scan memory.

Repeat steps 1 and 2 for other channels to be added.





ERASING CHANNELS

1 Press the CH# button(s) and then ENTER to select the channel to be erased.
2 Press ERASE.
A "–" appears for a moment to the left of the on-screen channel number display. This channel has now been erased from the channel scan memory.

Repeat steps 1 and 2 for other channels to be erased.

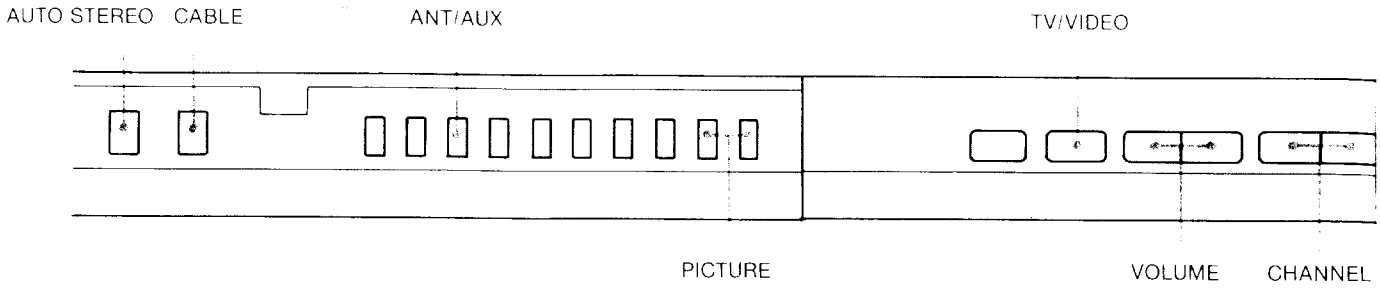
To add erased channels again, follow the steps in "ADDING CHANNELS".

Note

When a VHF or UHF channel is erased, the cable TV channel with the same number is also erased and vice versa.

OPERATION

VIEWING TV PROGRAMS



Receivable channels
VHF: 2–13
UHF: 14–69
Cable TV: 1–125

Cable TV channel chart*
Cable TV systems use letters or numbers to designate channels. To tune in a cable TV channel, refer to the chart below.

Number on this TV	1	5	6	14	15	16	17
Corresponding CATV channel	A–8	A–7	A–6	A	B	C	D

18	19	20	21	22	23	24	25	26	27	28	29	30
E	F	G	H	I	J	K	L	M	N	O	P	Q

31	32	33	34	35	36	37	38	39	.....	93	94
R	S	T	U	V	W	W+1	W+2	W+3	.....	W+57	W+58

95	96	97	98	99	100	101	102	.....	123	124	125
A–5	A–4	A–3	A–2	A–1	W+59	W+60	W+61	.....	W+82	W+83	W+84

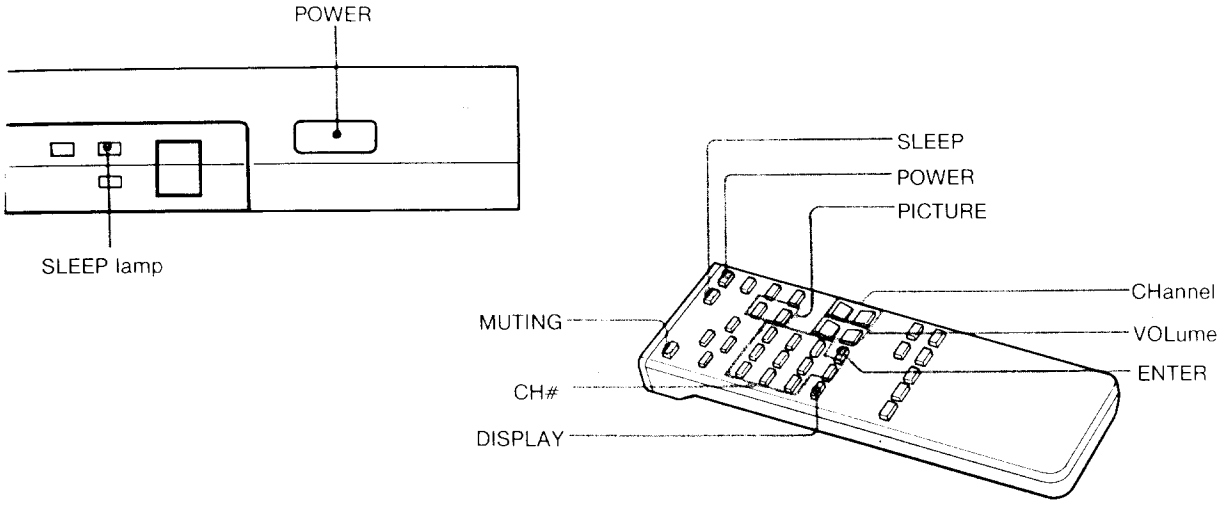
Check with your local cable TV company for more complete information on the available channels.

*The designation of the cable TV channels conforms to the EIA/NCTA recommendation.

PREPARATION

1 Press POWER to turn on the unit.
2 On-screen indications "VIDEO 1", "VIDEO 2", "VIDEO 3" or "EXT-A" should be off. If not, press TV/VIDEO so that they disappear.
3 Set AUTO STEREO to ON to receive stereo broadcasts.
4 Set CABLE and ANT/AUX according to the channel to be watched.

Channel	CABLE switch	ANT/AUX button
VHF	OFF	Press so that "AUX" disappears.
UHF		
Cable TV	ON	
Pay cable TV		Press so that "AUX" appears.



To select a channel directly

Press CH# button(s), then press ENTER.
For example, to select channel 125, press 1, 2, 5 and ENTER.
If you have pressed the wrong CH# button and have not pressed ENTER yet, wait until the on-screen channel number display disappears. Then press the correct buttons.

To scan the channels in numerical sequence

Press CHANNEL +/−.

To adjust the volume

Press VOLUME +/−.

To adjust the picture contrast

Press PICTURE +/−.

To keep the on-screen indications displayed

Press DISPLAY.
Press again to make them disappear.

To mute the sound immediately

Press MUTING. "MUTING" appears.
Press again to restore the sound to its previous level.

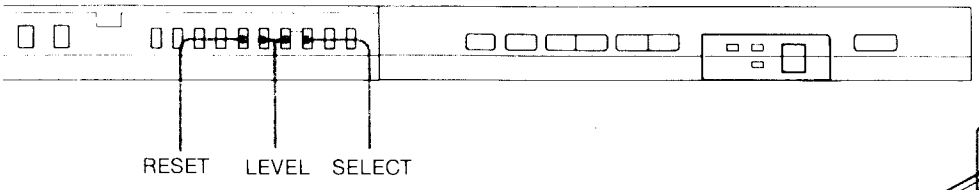
To have the unit turn off automatically after one hour

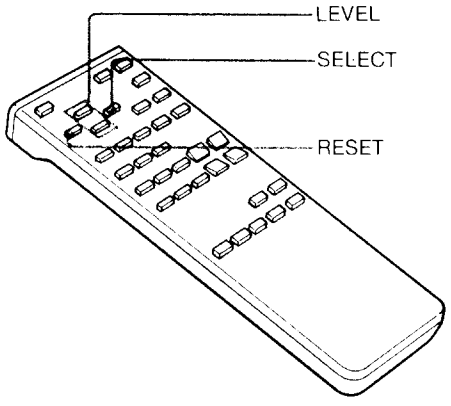
Press SLEEP. "SLEEP" appears for a moment.
The SLEEP lamp lights up and remains lit until the unit is turned off. To cancel the sleep timer, press SLEEP again so that the lamp goes off.

To turn off the unit

Press POWER again.

PICTURE AND SOUND ADJUSTMENTS





The following elements may be adjusted to suit individual tastes.
Picture: HUE, COLOR, BRIGHT (brightness), SHARP (sharpness).
Sound: TREBLE, BASS, BALANCE.

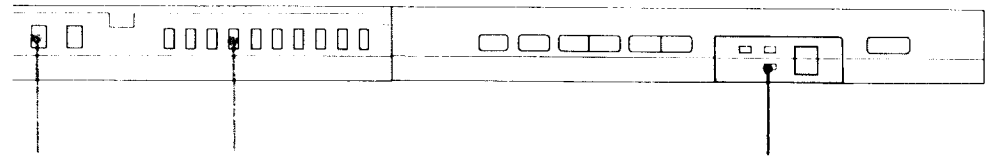
1 Press SELECT repeatedly until the element to be adjusted appears on the screen.
2 Press LEVEL +/– to adjust the selected element. A segmented color bar appears to indicate the level of adjustment.

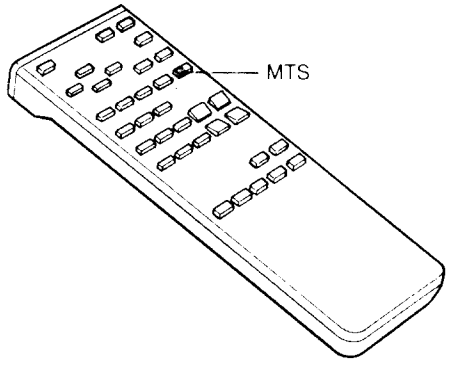
Selected element	LEVEL buttons	
	– (L) button	+ (R) button
HUE	Skin tone becomes purplish. The red segments increase.	Skin tone becomes greenish. The green segments increase.
COLOR	less color intensity	more color intensity The red segments increase.
BRIGHT	less brightness	more brightness The green segments increase.
SHARP	less sharpness	more sharpness The green segments increase.
TREBLE	less treble response	more treble response The green segments increase.
BASS	less bass response	more bass response The green segments increase.
BALANCE	The left speaker's output is emphasized. The green segments increase.	The right speaker's output is emphasized. The red segments increase.

To reset the elements to the factory-set levels

Press RESET. "RESET" appears for a moment.

LISTENING TO MULTICHANNEL TV SOUND (MTS) BROADCASTS





To receive a stereo broadcast

Normally, leave AUTO STEREO in the ON position. The STEREO lamp lights up whenever a stereo broadcast is received. To listen to this broadcast, press MTS so that "MAIN" appears.

To listen to a Second Audio Program (SAP) broadcast

Press MTS so that "SAP" appears.

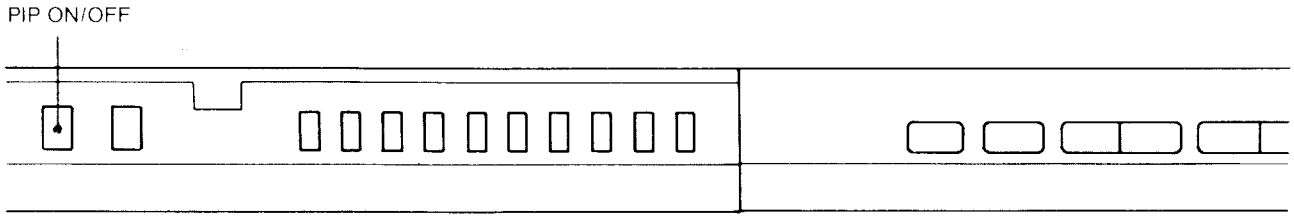
To listen to both MAIN and SAP broadcasts

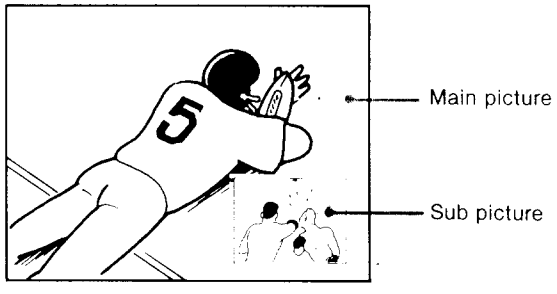
Press MTS so that "BOTH" appears. The MAIN and SAP sounds are emitted from the left and right speakers respectively. The MAIN sound becomes monaural even if it is a stereo broadcast.

Notes

- Excessive noise may be heard during a stereo broadcast as a result of weak signals. In this case, set AUTO STEREO to OFF. The sound becomes monaural but the noise should be eliminated.
- If the SAP or BOTH mode is selected when in fact there is no SAP broadcast, no sound is heard.

ENJOYING THE PICTURE-IN-PICTURE FEATURE



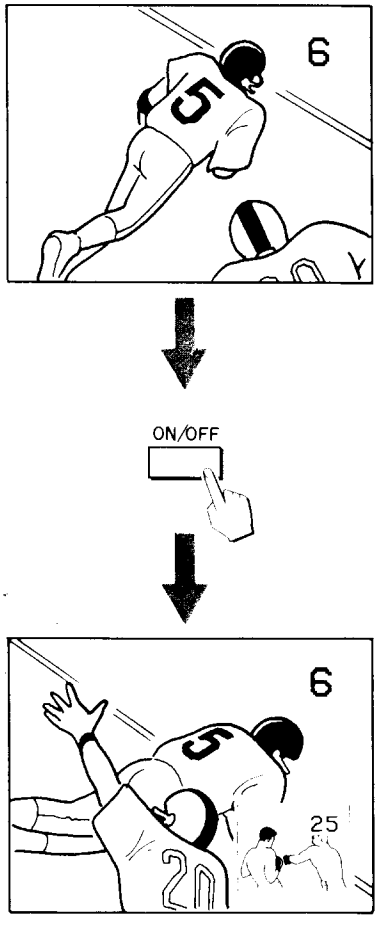


Besides the main picture, another TV channel or a video source can be displayed simultaneously as a sub picture.

Notes

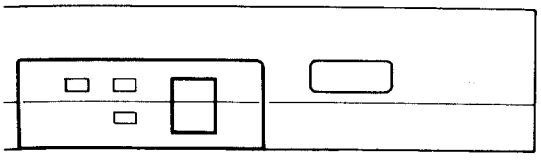
- The same channels as for the main picture can be displayed in the sub picture, except for the channels being received through the AUX terminal.
- The video signals of the sub picture are not output from the MONITOR OUTPUT jacks.

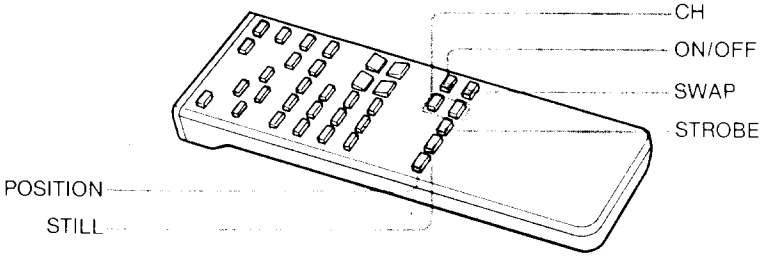
To display the sub picture



Press ON/OFF again to make the sub picture disappear.

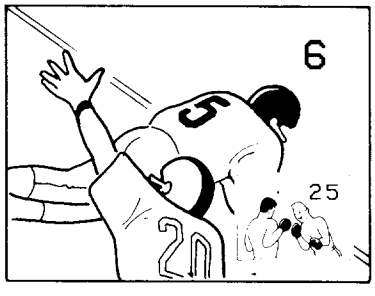
To scan the channels of the sub picture
Press CH +/–.

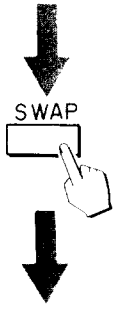


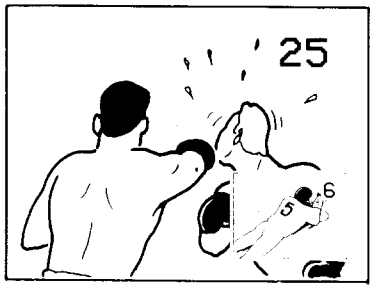


To swap the main and sub pictures

Display a sub picture.

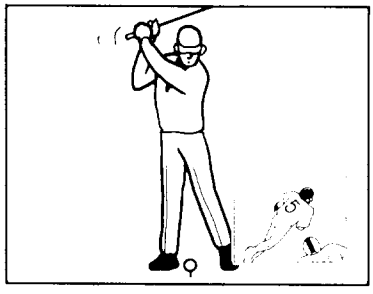


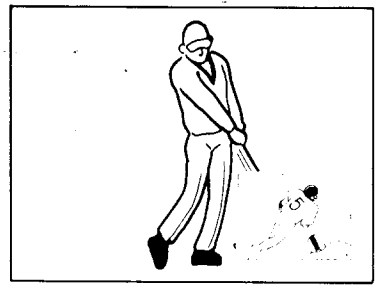




To display a still sub picture

Display a sub picture.



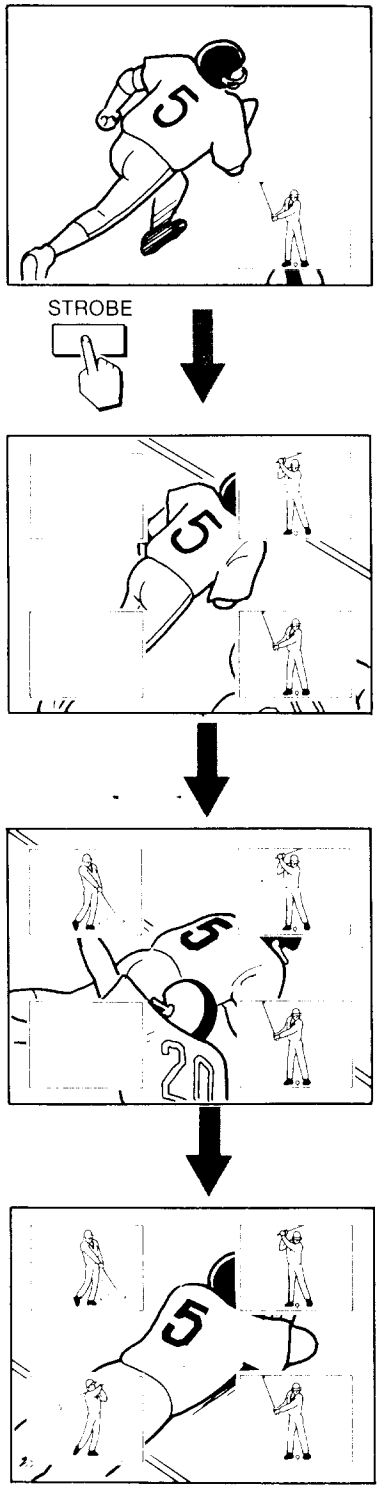


Press STILL again to restore the normal sub picture.

To display strobe pictures of the sub picture

Three time-lapse sequential sub pictures will appear.

Display a sub picture.

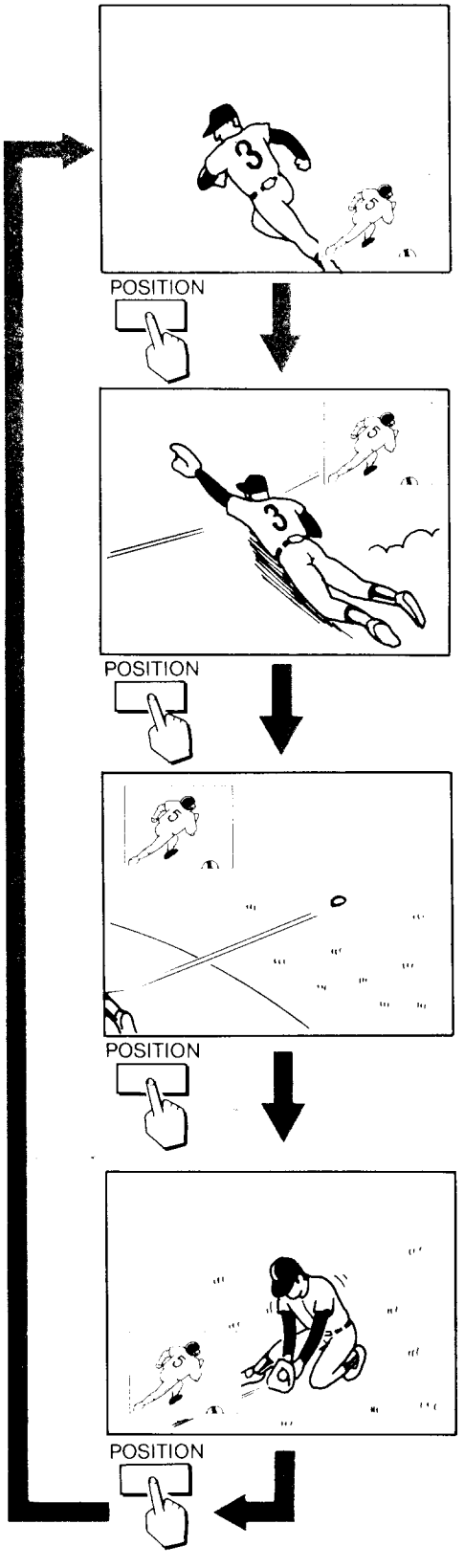


The first sub picture starts moving again.

Press ON/OFF to make all the sub pictures disappear.

To change the position of the sub picture

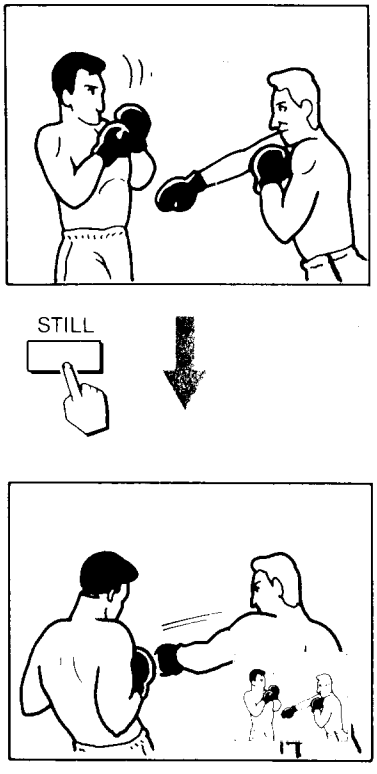
Display a sub picture.



To display a still picture of the main picture

The still picture will appear in the sub picture.

Press STILL without displaying a sub picture.



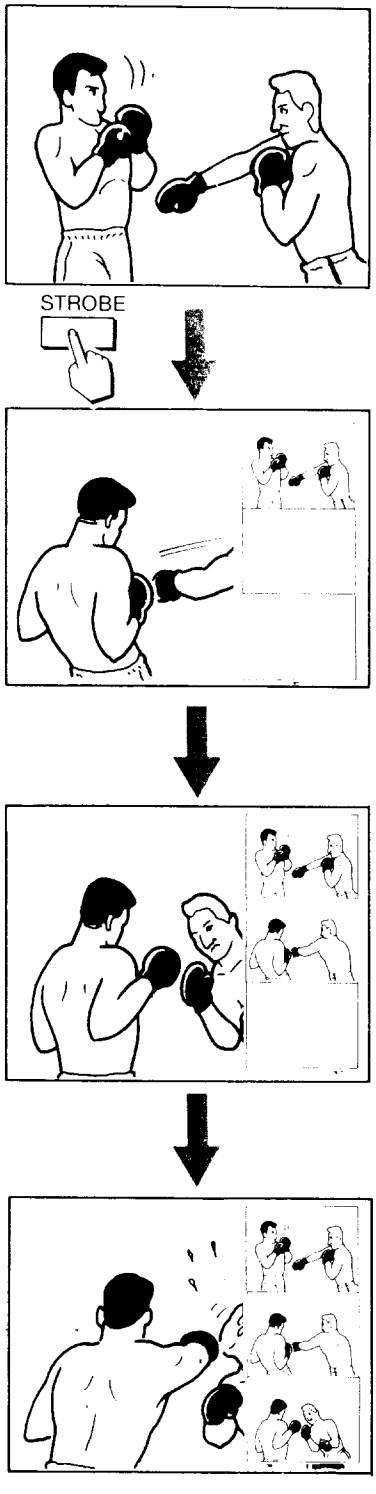
Press ON/OFF to make the sub picture disappear.

To change the position of the still picture
Press POSITION.

To display strobe pictures of the main picture

Three time-lapse sequential sub pictures will appear.

Press STROBE without displaying a sub picture.



Press ON/OFF to make the sub pictures disappear.

To change the position of the strobe pictures
Press POSITION.

To adjust the sub picture

Adjust the controls on the rear of the unit.

Element to be adjusted	Control
Picture contrast	PICTURE
Brightness	BRIGHT
Hue	HUE
Color intensity	COLOR

APPLICATIONS WITH OPTIONAL EQUIPMENT

Audio/video connecting cords

The required connecting cord differs depending on the type of audio and video jacks the equipment to be connected has. Refer to the following list of optional cords to select the appropriate connecting cord.

Connecting cord	Plugs to be connected to this unit	Plugs to be connected to optional equipment
VMC-2P3 (2m)	Video phono Audio phono (2)	Video phono Audio phono (2)
VMC-609MS (2m)	Video phono Audio phono (2)	Video phono Audio phono
VMC-2MP3 (2m)	Video phono Audio phono (2)	Video phono Audio mini
RK-74A (1.5m)	Audio phono (2)	Audio phono (2)

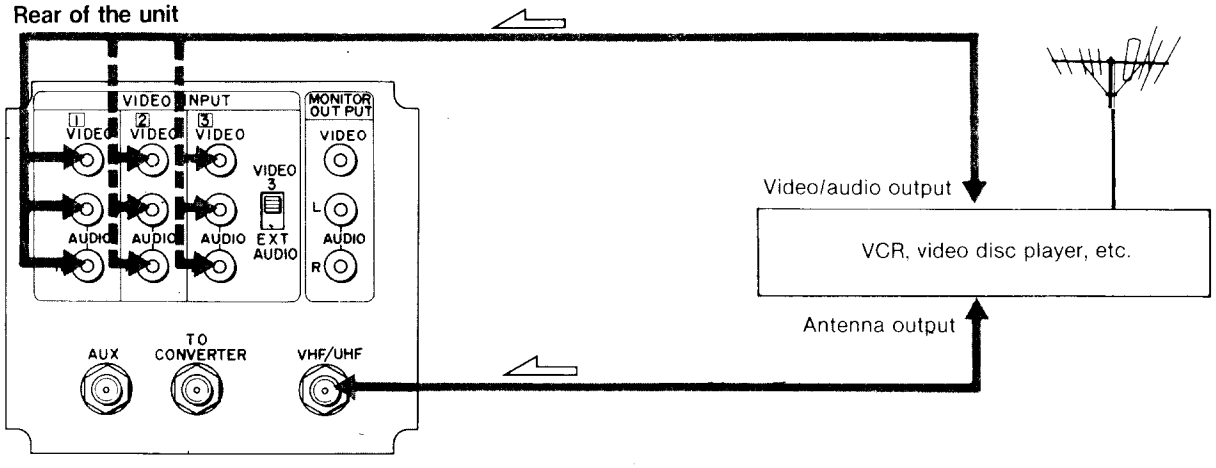
Notes

- Before making connections, turn off the power of all the equipment to be connected.
- Match the color of the plugs to the jacks.
- Make connections firmly. A loose connection may cause distortion in the picture and sound.
- ⇦ in the following diagrams indicate the direction of the signal flow.
- Move the equipment away from the TV, if the picture or sound is distorted.

Caution

Television programs, films, video tapes and other materials may be copyrighted. Unauthorized recording of such material may be contrary to the provisions of the copyright laws.

To view the picture of a VCR, video disc player, etc.



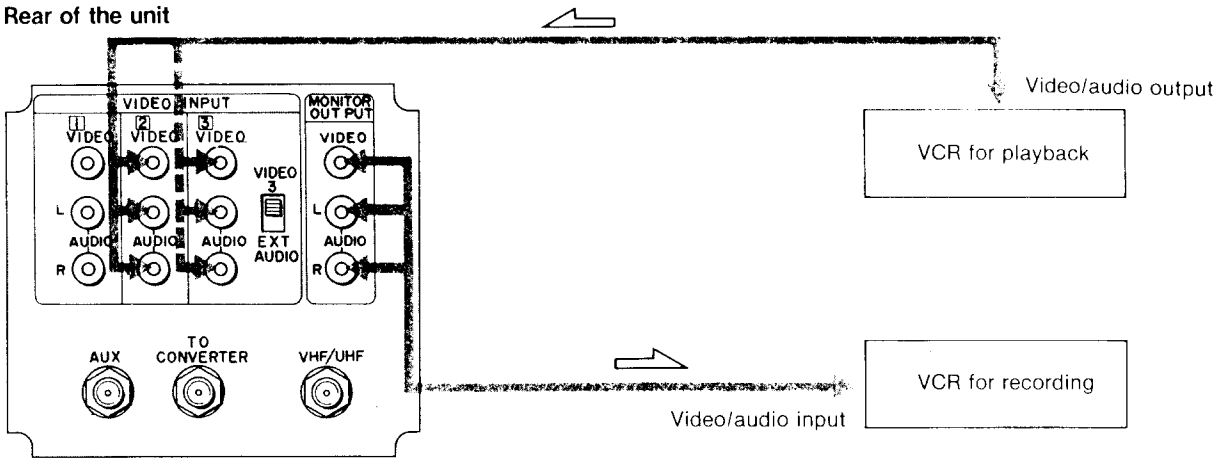
Operation

1 Press TV/VIDEO so that the desired video input mode appears on the screen: "VIDEO 1", "VIDEO 2" or "VIDEO 3".
The VIDEO lamp lights up.
2 Set the VCR to the playback mode.

Notes

- If the VCR is connected to VIDEO INPUT 3, set the VIDEO 3/EXT-AUDIO selector to VIDEO 3.
- If the VCR is monaural, connect the audio output to the AUDIO L(MONO) jack of VIDEO INPUT 1.

To edit tapes



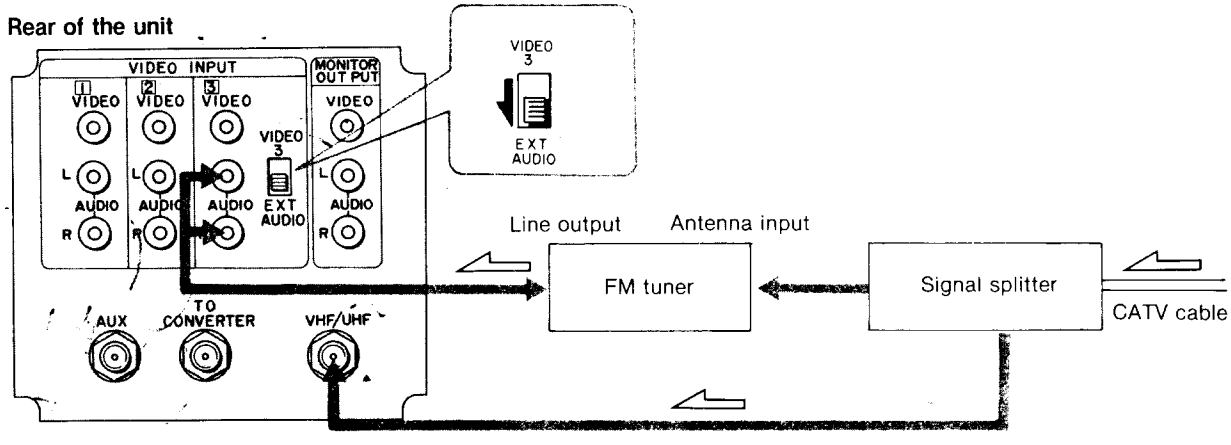
Operation

1 Display the desired video source (VCR playback or TV program) on the screen.
2 Set the VCR connected to MONITOR OUTPUT to the recording mode.

Note

Do not connect the VCR for playback to VIDEO INPUT 1, otherwise the playback picture will not be output from MONITOR OUTPUT.

To monitor FM simulcast programs, such as MTV (Music TV)



Operation

1 Set the VIDEO 3/EXT-AUDIO selector to EXT AUDIO.
2 Press TV/VIDEO so that " EXT-A" appears on the screen.
3 Tune in the desired channel on both the TV and the FM tuner.

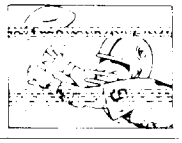
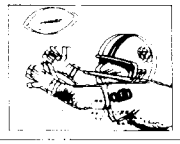
SPECIFICATIONS

Television standard	American TV standards
Channel coverage	VHF: 2–13 UHF: 14–69 Cable TV: 1–125
Picture tube	Microblack Trinitron **27-inch picture measured diagonally** 28-inch picture tube measured diagonally 110-degree deflection
Tuners	Two built-in tuners
Inputs	VIDEO INPUT 1, 2, 3 VIDEO: phono jack, 1 Vp-p, 75 ohms, unbalanced, sync negative AUDIO: phono jack, 408 mVrms (100% modulation, 47 kilohms)
Outputs	MONITOR OUTPUT VIDEO: phono jack, 1 Vp-p, 75 ohms, unbalanced, sync negative AUDIO: phono jack, 408 mVrms (100% modulation)
Power requirements	120 V AC, 60 Hz
Power consumption	175 W (max.) 4 W (in standby condition)
Accessories supplied	Remote Commander RM-740 with 2 size AA batteries Antenna connector (300 ohm to 75 ohm matching transformer)
Optional accessories	Audio/video connecting cables (See page 18.) U/V mixer EAC-66

Design and specifications are subject to change without notice.

TROUBLESHOOTING

Disturbances in picture and sound can often be eliminated by checking the symptoms and following the suggestions listed below. If the problem still cannot be solved, contact your nearest service facility.

SYMPTOM	CORRECTION
No picture (screen not lit), no sound	• Plug the unit into a working outlet. • Press POWER. • Check the TV/VIDEO button setting. • Check antenna connections.
Poor or no picture (screen not lit) but good sound	• Press PICTURE +. • Adjust BRIGHT with the ADJUSTMENT buttons. • Press RESET.
Good picture but no sound	• Press VOLUME +. • If "MUTING" is displayed on the screen, press MUTING. • Check the VIDEO 3/EXT-AUDIO selector setting. • Select the MTS sound being broadcast.
No color for color programs	Adjust COLOR with the ADJUSTMENT buttons.
Snow and noise	• Is it an active or the correct channel? • Check the CABLE switch setting. • Check the ANT/AUX button setting. • Check antenna connections.
Dotted lines or stripes 	This may be caused by local interference (e.g. cars, neon signs, hairdryers, etc.). Adjust the antenna for minimum interference.
Double images or "ghosts" 	This may be caused by reflections from nearby mountains or buildings. A highly directional outdoor antenna or CATV cable may improve the picture.
Try another channel. It could be station trouble.	